

## **Bottomless Lakes State Park, Roswell, New Mexico Section 206 Aquatic Habitat Restoration Project**

The Bottomless Lakes State Park Aquatic Habitat Restoration Project is being conducted under the authority of Section 206 of the Water Resources Development Act of 1996 (Public Law 104-303 Section 22 U.S. C. 2330). This law provides the U.S. Army Corps of Engineers (USACE) with the authority to undertake aquatic ecosystem restoration and protection projects provided that each project: 1) will improve environmental quality; 2) is in the public interest; and 3) is cost-effective. The authority requires that a non-federal sponsor initiate each project. The non-federal sponsor for this project is the State Parks Division of the New Mexico Energy, Minerals, and Natural Resources Department. The non-federal sponsor is responsible for 35% of the project costs, which include planning and construction of the project. The USACE provides 65% of the project costs up to \$5,000,000.

Bottomless Lakes State Park is located about 12 miles southeast of Roswell, New Mexico and was established as New Mexico's first state park in 1933. The park includes seven sinkhole lakes formed in gypsum deposits. Lea Lake, the largest of the seven lakes, has a surface area of about 15 acres and a maximum depth of about 90 feet. Although modest camping developments are provided at all of the lakes, Lea Lake has the most extensive developed recreation facilities, including a swimming beach, a recreational vehicle campground with hookups, showers, a large tent camping and day-use area with covered picnic tables and sports areas, and a historic building constructed by the Civilian Conservation Corps.

Unlike the other seven sinkhole lakes at Bottomless Lakes State Park, Lea Lake has an outflow that sustains about 715 acres of wetlands to the south. Most of the wetlands are on lands that are privately-owned or managed by the Bureau of Land Management, but approximately 43 acres of wetland sustained by Lea Lake outflow are located within the park boundary south of NM Highway 409 (Figure 1).

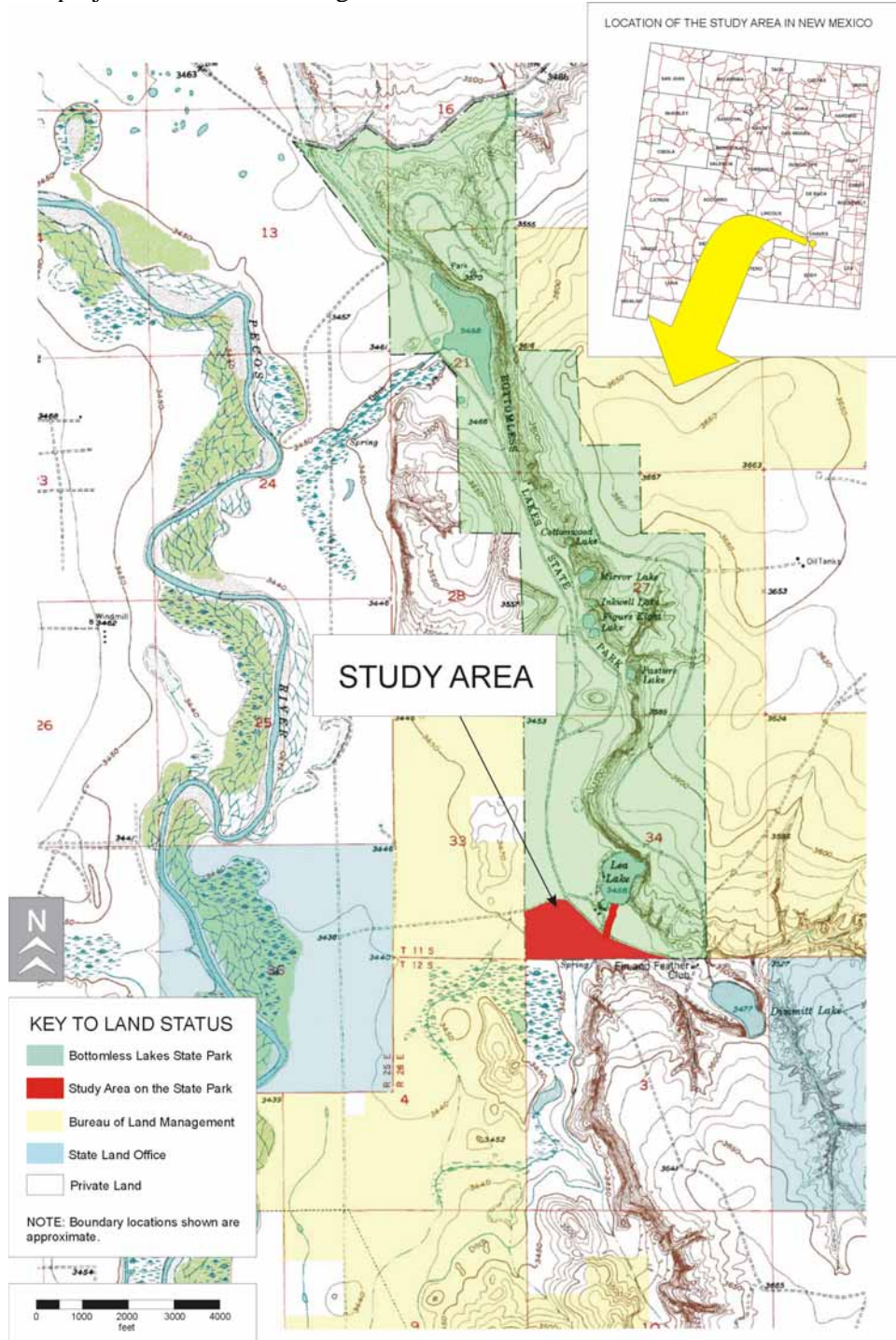
The project would include restoration of approximately 43 acres (Figure 2) of wetland habitat by implementing the following elements:

- increasing the Lea Lake outlet channel capacity from 15 cfs to 25 cfs;
- removing all salt cedar from the approximately 43-acre study area;
- removing all solid waste debris from the study area;
- constructing three open water habitats totaling approximately 2.07 acres;
- planting supplemental wetland vegetation in solid waste debris removal areas and around the margins of open water habitats (approximately 7.32 acres); and
- constructing a 0.5-acre gravel parking lot, a 3,786-ft gravel loop trail, a 517-ft raised boardwalk trail, and four wildlife viewing blinds.

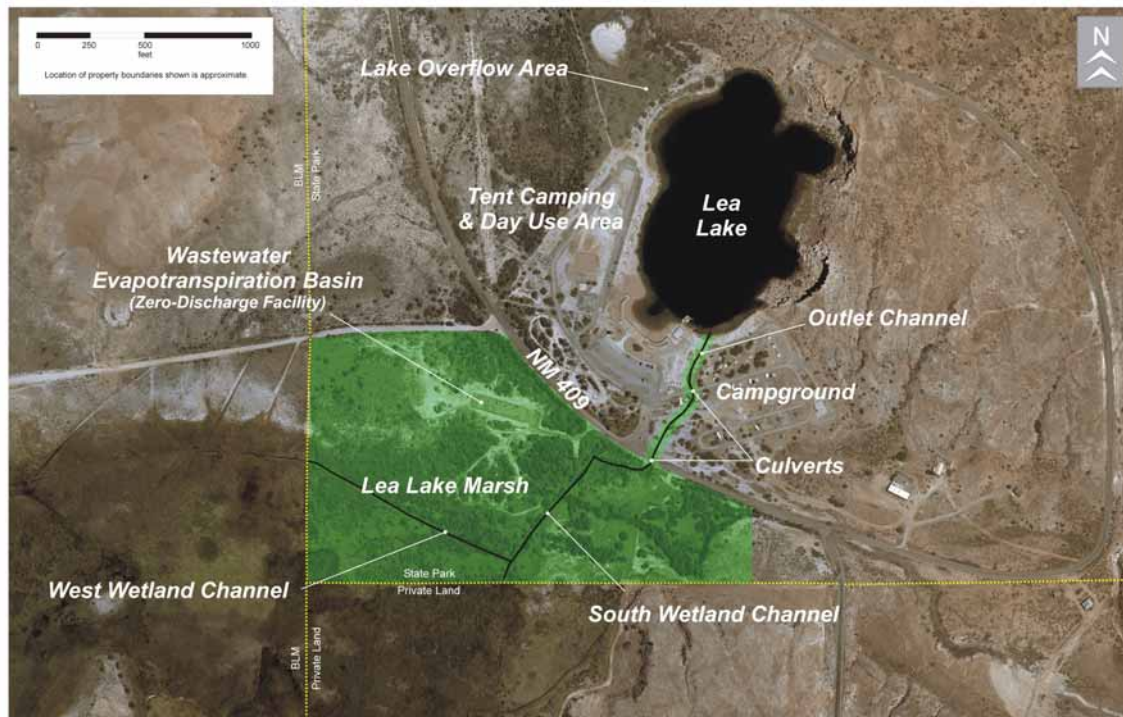
Restoration of aquatic and wetland habitat at Bottomless Lakes State Park and interpretation of these important resources are identified as high-priority management goals for the park. Aquatic and wetland habitats are relatively rare in New Mexico, yet they support a high diversity of native plants and wildlife. For example, over 55% of the vertebrate species that occur in the state rely wholly, or in part, on aquatic or wetland habitat for their survival. Wetland and aquatic habitats are particularly critical in the restoration and management of special-status species, as well over half of the species listed as threatened or endangered in the state are associated with wetland or aquatic habitats. However, it is estimated that fully one-third of the wetlands that once existed in the state have been lost, with only about 482,000 acres of these habitats now remaining in the

State, most of which are located in the northern third of New Mexico. Desert wetland systems such as Lea Lake Marsh are relatively rare. Although Lea Lake Marsh is only about 43 acres in size, it is part of a larger desert wetland complex that encompasses about 715 acres and serves as the headwaters for this wetland ecosystem.

The project is scheduled to begin construction in October 2008.



**Figure 1.** Location of the feasibility study area at Bottomless Lakes State Park near Roswell, Chaves County, New Mexico.



**Figure 2.** Aerial photograph of the project area.